IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) A positive electrode active material containing a lithium transition metal composite oxide represented by the general formula $LiCo_xA_yB_zO_2$ where A denotes at least one element selected from the group consisting of Al, Cr, V, Mn and Fe, and B denotes at least one element selected from the group consisting of Mg and Ca and x, y and z are such that $0.9 \leq x < 1$, $0.001 \leq y \leqq 0.05$, and $0.001 \leq z \leqq 0.05$; and

wherein a band-shaped positive electrode comprising a metal foil is coated with a positive electrode mixture containing the positive electrode active material and a binder, the metal foil being coated by the mixture on both surfaces of the metal foil; and the positive electrode being spirally wound with a negative electrode by interposing a separator in-between.

2. (Currently Amended) A non-aqueous electrolyte secondary cell comprising:

(a) a positive electrode~~;~~

(b) a negative electrode~~;~~

wherein said positive electrode is coated with a positive electrode mixture containing the positive electrode active material on both surfaces of a metal foil; and said negative electrode is coated with a negative electrode mixture containing the negative electrode active material on both surfaces of a metal foil and said negative electrode is stacked and spirally wound by interposing a separator in-between, and;

(c) a non-aqueous electrolyte interposed between the positive and negative electrodes, the positive electrode having a positive electrode active material containing a lithium transition metal composite oxide represented by the general formula $LiCo_xA_yB_zO_2$ where A denotes at least one element selected from the group consisting of Al, Cr, V, Mn and Fe, and B denotes at least

one element selected from the group consisting of Mg and Ca, and x, y and z are such that $0.9 \leq x < 1$, and $0.001 \leq y \ll \leq 0.05$, and $0.001 \leq z \ll \leq 0.05$; and the non aqueous electrolyte comprises a lithium salt dissolved in the electrolyte.

3. (Original) The non-aqueous electrolyte secondary cell according to claim 2, wherein the negative electrode uses an active material capable of doping/undoping lithium ions; the active material including a material selected from the group consisting of a carbonaceous material, an alloy material, and a polymer including polyacetylene polymer.

4. (Original) The non-aqueous electrolyte secondary cell according to claim 3, wherein the negative electrode active material comprises a carbonaceous material which comprises at least one of a pyrocarbons, pitch coke, needle coke, petroleum coke, graphite, vitreous carbon fibers, sintered organic polymer compounds, carbon fiber, and activated charcoal.

5. (Original) The non-aqueous electrolyte secondary cell according to claim 3, wherein the negative electrode is a material that can be alloyed with lithium and includes a compound represented by a chemical formula $M_xM'_yLi_z$ where M is an element of the group 3A or a metal other than the group 4A-excluding carbon, M' is one or more metal element other than the element Li and the element M, x is a numerical value larger than 0, and y, z are numerical values greater than 0.

6. (Canceled)

7. (Original) The non-aqueous electrolyte secondary cell according to claim 2, wherein the electrolyte is a solution of an electrolyte in a non-protonic non-aqueous solvent.

8. (Original) The non-aqueous electrolyte secondary cell according to claim 7, wherein the electrolyte is a solution of a mixture of one or more cyclic carbonates or chained carbonates.

9. (Original) The non-aqueous electrolyte secondary cell according to claim 8 wherein the electrolyte comprises, as the cyclic carbonate, at least one of an ethylene carbonate, propylene carbonate, butylene carbonate, vinylene carbonate and gamma butyrolactone, the electrolyte comprising, as the chained carbonate, a solvent selected from the group consisting of dimethyl carbonate, diethyl carbonate, and dipropyl carbonate.

10. (Original) A method for the preparation of a positive electrode active material comprising the steps of:

(a) mixing a cobalt compound, a lithium compound, a compound of at least one element selected from the group consisting of aluminum, chromium, vanadium, manganese and iron and a compound of at least one element selected from the group consisting of magnesium and calcium, at a pre-set ratio; and

(b) sintering a mixture from the mixing step to produce a compound represented by the general formula $LiCo_xA_yB_zO_2$ where A denotes at least one element selected from the group consisting of Al, Cr, V, Mn and Fe, and B denotes at least one element selected from the group consisting of Mg and Ca, and x, y and z are such that $0.9 \leq x < 1$, $0.001 \leq y \leq 0.05$, and $0.001 \leq z \leq 0.05$;

the compound of at least one element selected from the group selected from the group consisting of magnesium and calcium, as used in the mixing step, being magnesium carbonate or calcium carbonate.

11. (Original) A method for the preparation of a non-aqueous electrolyte secondary cell comprising a positive electrode, a negative electrode, and a non-aqueous electrolyte interposed between the positive and negative electrodes, comprising, in producing the positive electrode, the steps of:

(a) mixing a cobalt compound, a lithium compound, a compound of at least one element selected from the group consisting of aluminum, chromium, vanadium, manganese and iron and a compound of at least one element selected from the group consisting of magnesium and calcium, at a pre-set ratio; and

(b) sintering a mixture from the mixing step to produce a compound represented by the general formula $LiCo_xA_yB_zO_2$ where A denotes at least one element selected from the group consisting of Al, Cr, V, Mn and Fe, and B denotes at least one element selected from the group consisting of Mg and Ca, and x, y and z are such that $0.9 \leq x < 1$, and $0.001 \leq y \leq 0.05$, and $0.001 \leq z \leq 0.05$; and the compound of at least one element selected from the group consisting of magnesium and calcium, as used in the mixing step, being magnesium carbonate or calcium carbonate.

12. (Original) The method according to claim 11, wherein the negative electrode contains an active material capable of doping/undoping lithium ions; the active material is selected from the group consisting of a carbonaceous material, and a polymer including polyacetylene polymer.

13. (Original) The method according to claim 12, wherein the negative electrode comprises carbonaceous material which is selected from the group consisting of a pyrocarbon, pitch coke, needle coke, petroleum coke, graphites, vitreous carbon fibers, sintered organic high polymer compounds, carbon fiber, and activated charcoal.

14. (Original) The method according to claim 12, wherein the negative electrode is a material that can be alloyed with lithium and includes a compound represented by a chemical formula $M_xM'_yLi_z$ where M is an element of the group 3A or a metal other than the group 4A excluding carbon, M' is one or more metal element other than the element Li and the element M, x is a numerical value larger than 0, and y, z are numerical values greater than 0.

15. (Original) The method according to claim 11 wherein the electrode is a band-shaped positive electrode coated with a positive electrode mixture containing the positive electrode active material on both surfaces of a metal foil, and a band-shaped negative electrode coated with a negative electrode mixture containing the negative electrode active material on both surfaces of a metal foil, the positive electrode and the negative electrode being stacked and wound spirally by interposing a separator in-between.

16. (Original) The method according to claim 11, wherein the electrolyte is a solution of an electrolyte in a non-protonic non-aqueous solvent.

17. (Original) The method according to claim 16, wherein the electrolyte is a solution of a mixture of one or more selected from cyclic carbonates or chained carbonates.

Under Each Applicant Arguments

18. (Original) The method according to claim 16, wherein the electrolyte uses, as the cyclic carbonate, a solvent selected from the group consisting of ethylene carbonate, propylene carbonate, butylene carbonate, vinylene carbonate and gamma butyrolactone, the electrolyte using, as the chained carbonate, a solvent selected from the group consisting of dimethyl carbonate, diethyl carbonate, and dipropyl carbonate.

19. (Original) The method according to claim 16, wherein electrolyte comprises one of the inorganic solid electrolyte and a high molecular solid electrolyte as material exhibiting lithium ion conductivity.

20. (Original) The according to claim 16 wherein the electrolyte comprises one or more lithium salts selected from the group consisting of LiCl, LiBr, $LiPF_6$, $LiClO_4$, $LiAsF_6$, $LiBF_4$, $LiCH_3SO_3$, $LiCF_3SO_3$, $LiN(CF_3SO_2)_2$, or $LiB(C_6H_5)_4$.